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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,831	11/21/2003	Steven R. Sedlmayr	AUO1023	2968

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EXAMINER

FINEMAN, LEE A

ART UNIT PAPER NUMBER

2872

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,831

Applicant(s)

SEDL MAYR, STEVEN R.

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 371 and 372 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 371 and 372 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to an amendment filed 18 January 2005 in which claims 371-372 were amended. Claims 371-372 are pending.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the altering means for altering **the resolved beam in a pixel-wise manner** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 371-372 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended claims 371 and 372 to include in the step [f] limitation an “altering means whereby the selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of **the resolved beam of light** is altered in a pixel-wise manner...” However, the only altering means that alters the resolved beam which is shown in the drawings or discussed in the specification is quarter-wave retarder 188 which is not detailed to alter any beams in a pixel-wise manner (see page 90, lines 16-21). Therefore the above amended limitation is taken to be new matter.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 371 and 372 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurematsu et al., U.S. Patent No. 5,267,029 in view of Konno et al., U.S. Patent No. 4,497,015 and Jachimowicz et al., U.S. Patent No. 4,995,718.

Kurematsu et al. disclose in fig. 2 a method of producing a modulated beam of electromagnetic energy/light comprising: [a] producing (via 13 and 12) an initial beam of electromagnetic energy/light having a predetermined range of wavelengths (S_w);

[b] separating (via 7 and 11) the initial beam of electromagnetic energy/light into two or more separate beams of electromagnetic energy/light, each of the separate beams of electromagnetic energy/light having a selected predetermined orientation of a chosen component of electromagnetic wave field vectors (S_B , S_G , P_R)

[c] altering (via 4, 6 and 8) the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the separate beams of electromagnetic energy/light by passing the plurality of portions of each of the separate beams of electromagnetic energy/light through a respective one of a plurality of altering means whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy/light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially separate beams of electromagnetic energy/light passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors (column 4, lines 29-38);

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[d] combining (via 14, 15 and 5) the altered separate beams of electromagnetic energy/light into a single collinear beam of electromagnetic energy/light ($S_B + P_G + P_R$) without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy/light;

[e] resolving (via 5) from the single collinear beam of electromagnetic energy/light a first resolved beam of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy/light having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another (fig. 2).

Kurematsu et al disclose the claimed invention except for the initial beam having a substantially uniform flux intensity substantially across the initial beam of electromagnetic energy/light and [f] altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of the resolved beam of electromagnetic energy/light by passing the plurality of portions of the resolved beam of electromagnetic energy/light through a altering means whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of the resolved beam of electromagnetic energy/light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of the resolved

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beam of electromagnetic energy/light passes through the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors.

Konno et al. teach a light illumination device (fig. 5) that produces a primary beam (at M) that has a substantially uniform flux intensity substantially across the initial beam of light (column 5, lines 43-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the illumination device of Kurematsu et al. with that of Konno et al. to have a more uniform intensity light beam and provide a more consistent image.

Further, Jachimowicz et al. teach a projection display (see figs. 2 and 5) wherein the altered and combined beam (30, 32, and 34) is then altering (via 46) the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of the resolved beam of electromagnetic energy/light by passing the plurality of portions of the resolved beam of electromagnetic energy/light through a altering means whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of the resolved beam of electromagnetic energy/light is altered in a pixel-wise manner (in at least so far as the ERC can be considered one pixel) in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of the resolved beam of electromagnetic energy/light passes through the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors (column 3, lines 30-41) to provide three dimensional viewing to a user with polarized glasses (column 4, lines 16-22). It

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would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the projector of Kurematsu et al. as suggested by Jachimowicz et al. (i.e. add the switching components to alter the beam and polarizing glasses) to provide three dimensional viewing (Jachimowicz, column 4, lines 16-22).

Response to Arguments

6. Applicant's arguments filed 18 January 2005 have been fully considered but they are not persuasive.

Applicant argues that Jachimowicz does not teach an altering means which alters in a pixel-wise manner, i.e. a pixel-by-pixel basis because it changes the polarization of the entire beam that passes through it. The examiner respectfully disagrees. The specifications and claims fail to define what size a pixel is for the altering means which alters the resolved beam, so it is the examiner's position that the altering means of Jachimowicz does alter in a pixel-wise manner in at least so far as the ERC can be considered one pixel.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LAF

March 23, 2005


MARK A. ROBINSON
PRIMARY EXAMINER